

Northern Hub

Submission to the

Productivity Commission

Inquiry into the effectiveness, efficiency and appropriateness of Part 3 of the Future Drought Fund Act 2019.

The Northern Hub

The Northern Hub, formerly the Northern Western Australia and Northern Territory Drought Resilience Adoption and Innovation Hub (the Hub) was established alongside seven other drought hubs nationally. The initial role of the Hub was to support the Future Drought Fund's objectives across the Hub's region. However, since its inception, the Hub's role and remit has expanded to support the implementation of the four innovation priorities of the National Agricultural Innovation Agenda (NAIA) across the Hub's region. These priorities are:

- 1. Australia is a trusted exporter of premium food and agricultural products by 2030
- 2. Australia will champion climate resilience to increase the productivity, profitability and sustainability of the agricultural sector by 2030
- 3. Australia is a world leader in preventing and rapidly responding to significant incursions of pests and diseases through future proofing our biosecurity system by 2030
- 4. Australia is a mature adopter, developer and exporter of digital agriculture by 2030

With consideration of the region's unique and vast landscape, the Hub is committed to becoming a true advocate for the North and is looking to drive both government and private investment and development across the region. The Hub will do this alongside its commitments to embedding drought resilience and drought preparedness and the NAIA's priorities over the coming 10-year period.

The core consortium partners of the Northern Hub include Charles Darwin University, industry bodies (Kimberley Pilbara Cattlemen's Association, Northern Territory Cattlemen's Association, Northern Territory Farmers Association) as well as NRM organisations (Territory NRM, WA Rangelands NRM), Regional Development Australia and government agencies (WA Department of Primary Industries and Regional Development and the NT Department of Industry Tourism and Trade).

Outcomes to date

The Hub is currently in its foundational stage in which it is building its capacity and capability. It is taking a considered approach to ensure it has a sustainable model that addresses the vast region and diverse needs of its stakeholders. To date the Hub has focused on land management as it has addressed the requirements set out by core funding agreements. These initiatives have begun to address:

- Practice change to improve drought resilience of land managers, Traditional Owners, and communities
- A cross-sector focus that includes pastoralism, broadacre cropping, horticulture, forestry and water management
- Establishing a knowledge base that supports a portfolio of programs and extension activities that can effectively meet the drought response and resilience building needs of rural stakeholders
- Disseminating knowledge and techniques through a centralised repository
- Capturing and recognising existing producer knowledge and strategies

A key role for the Hub during this phase is developing its awareness and presence across the region. The Hub is focused on creating strong networks across the region and partnering with its core members to ensure they are identifiable and present within the communities they serve.

Are the funding principles, vision, aim, strategic priorities, and objectives of the Funding Plan appropriate and effective?

We believe the overall structure of the Funding Plan is appropriate.

- The hub-and-node model of the Drought Hubs enables the national agenda to be tailored to regional issues, concerns and producer priorities. The model's administrative burden is justified if agroecological solutions are made readily available to localised conditions. The Northern Hub feels this acutely since our issues are markedly different from the Southern states (e.g.; remoteness, less developed sectors, tropical and monsoonal habitats)
- The hub-and-node model is enabling new networks to be built across state boundaries and
 organisational types. The Northern Hub is collaborating on projects with six other Hubs, and
 is submitting joint applications that cross hub and state boundaries. The Northern Hub has a
 core membership that includes government, natural resource groups, industry
 representative bodies, and a university, and is thus improving the way these organisations
 work toward related goals.
- Non-Hub funding for drought activities, via competitive funding opportunities, provides a
 useful way to address specific areas such as building community resilience / support
 measures.

As a recipient of funds under the program, the Hub has found the Act to be a suitable instrument to govern the programs. The advisory committee and Hub advisory committee ensure a producer voice at the national level which has worked well.

When considering the effectiveness of Part 3 of the Act, the Northern Hub, as one of the programs, is able to perceive the direct impact of the Act at the local, State/Territory and National level.

Due to the establishment of the Act and its programs we have been able to create the Northern Hub, and for the first time our region has a core group that is working across jurisdictions and bringing together industry, research, Government, environment, development and tertiary education bodies to create a lasting partnership. This critical mass of key organisations has already been successful in building our region's drought resilience.

It is crucial to recognise the unique nature of the Hub and its region's characteristics. The scale and breadth of this region, the lack of commercial imperatives, lack of infrastructure, small population and isolation makes the undertaking of any activity more costly, hazardous and challenging than any other part of the country.

The Hub region encompasses the traditional lands of over 100 Aboriginal cultural groups. An estimated 920,000 km2 of land within the Hub region is currently under Indigenous ownership and/or management. A key focus for the Hub in 2022/23 is to identify projects that specifically help First Nations primary producers and/or First Nations rural and regional communities to become more prepared for, and resilient to, future droughts.

The Hub enables the region to punch above its weight, and leverage investment(s) to support other initiatives. For example, the Hub is playing, and will continue to play, a key role in providing extension and adoption pathways for the newly created Research Institute for Northern Agriculture (RINA) at CDU. RINA and the Hub are co-located; RINA seeks to deliver improved research and education capacity in agricultural that supports the growth agenda of the broader industry, including Indigenous enterprises, support sustainable development, and contribute to Commonwealth and Territory strategic growth agendas for the primary production sector. Together, RINA and the Hub's extension and adoption team have the opportunity to deliver lasting impact across the region.

Do the programs, arrangements and grants focus on the right priorities to support drought resilience? If not, what should the programs, arrangements and grants focus on and why?

For public good activities such as building drought resilience in our region there are minimal returns for private service providers and there is a strong argument for ongoing Federal Government partnership and support for the Hub. The Hub is unique in addressing the clear market failure over the availability and accessibility of research, development, extension, and adoption services tailored to the specific needs of the region.

Market Failure¹ occurs when a potential benefit to all community members outweighs the cost of that investment, but no private organisation would make that investment as:

- o their individual share of the benefit is less than the investment cost; and
- once the benefit is realised it is freely accessible by all so cannot be sold for commercial return.

Market failure across the region exists due to the regions size and scale (3m km²) making commercial return for private enterprises in the region unviable. Private enterprises are deterred by vastness of the region including the number of square kilometres to service, along with the population density including landowners, and level of infrastructure and services across the region. This scenario has resulted in a far smaller commercial imperative to act, resulting in less opportunities for the region with limited to no economic gain in the provision of Research, Development, Extension and Adoption services by private enterprise, creating distinct market failure. Sustained Government / Public investment is needed to support the region to generate the same scale of opportunities as the Southern and Eastern parts of Australia.

Another challenge facing the Northern Hub's region, is the gap between the capability and capacity of the top 25% and bottom 75% of farming operations that is preventing the adoption of the currently available Research and Development². Rather than developing additional R&D, the focus needs to be on enabling Extension and Adoption across the region to support building capability and capacity amongst landowners. Capacity Building is a key strategic pillar of the Northern Hub in order to bridge the existing gaps between the top 25% and bottom 75% of producers and as a result, embed drought resilience, enable landowners to undertake innovation and to improve capability and productivity across the region. Sustained government / public investment in the Hub will enable this work to be undertaken over a sustained period and support the hub to close capacity gaps and increase the uptake of the currently available research and development.

The Hub is home to approximately 294 of the 459 registered pastoral stations in Western Australia (64%) and 220 pastoral leases across the Northern Territory; with an estimated 3.15m head of cattle across both states³. Across the NT alone, the agriculture, forestry and fishing industry generated \$924million for the NT economy n 2020-21⁴ and is strongly linked to the money generated in the manufacturing, transport, retail, and wholesale trade industries across the NT. To ensure the continued strength and success of the industry, and the jobs they provide, and to prevent further market failure, sufficient and sustained government funding is required. This will enable the region to support dedicated Extension and Adoption officers to implement and scale tailored solutions in each of the Hub's sub-regions.

¹ market failure | economics | Britannica

² Improving-the-performance-of-northern-beef-enterprises.pdf (futurebeef.com.au)

³ MLA, (2021), Cattle nerd – Populations changes 2019-20 on 2018-19 percentage change, Meat and Livestock Australia, North Sydney

To date, Government funding for the establishment and initial delivery of the eight (8) Hubs has been allocated on an equal basis across each of the regions. This approach does not account for the unique and pronounced drought challenges experienced across the Hub region due to the market failure and climate challenges outlined above. As a result, the short-term Government funding commitment to date does not adequately account for the foundational establishment of the Hub and the need for post 2024 funding commitment. A review of the required funding to enable the Hub to operationalise and deliver meaningful outcomes and establish the entity in such a way that will deliver tangible outcome with respect to drought resilience and preparedness and innovation across the region is required.

Should the scope of the Fund be broadened to support resilience to climate change? Why or why not?

We support resilience being viewed in the broader context of climate change and adaptation but believe if the scope is increased there should still be an element that specifically focuses on building drought resilience – especially as there is a high risk of drought frequency and duration increasing under climate change.

Whilst there are many adverse impacts of Climate Change drought builds slowly and it is often too late before for interventions once it is occurring. It also can last for long periods and be difficult to recover from as it often impacts multiple income sources for primary producers whilst causing additional costs.

How could the Fund enhance engagement with and benefits for Aboriginal and Torres Strait Islander people?

Establishing meaningful relationships and working with Indigenous communities can need very long time frames e.g. 5-10 years. It is key that the Federal Government consider long term financial commitment to the Hub in recognition of the regions operating environment and the long-term ambition to improve productivity and sustainability of the production systems and communities.

Northern Hub does have dedicated First Nations Director and specific Drought extension and adoption projects that specifically help First Nations primary producers and/or First Nations rural and regional communities to become more prepared for, and resilient to, future droughts involving innovative and transformative Research, Development, Extension, Adoption & Communication (RDEA&C) activities with a focus on the needs of end users; and/or the delivery of effective communication of new and existing knowledge and technologies.

It is imperative for the government to make long-term investments in helping these communities continue to build their resilience to the impacts of Climate Change.

What opportunities are there to enhance collaboration in planning and delivering drought resilience initiatives, including with state and territory governments?

The 8 Hubs across Australia have built an integrated and interwoven national network that should be supported to endure and should be utilised in developing the next FDF Investment Plan. Our networks are vast and include the entire Agricultural extension and adoption eco-system from the farm gate, to Government at all levels, Universities, producer groups, Agri-political bodies and RDC's. Our co-design process can feed significant information into the planning arrangements for programs and future grants.

The Hubs have generated new collaborations and partnerships, strengthened existing networks and provided a focus on drought resilience. There is strong positive collaboration at a range of levels between all Hubs, which has reduced duplication and added value to a range of programs.

The FDF should continue to support the hubs to foster this collaboration and continue to encourage cross-hub projects and utilise the Hubs to manage more of the programs they offer.

Case Study – Cross-jurisdictional collaboration already paying dividends in the North

The establishment of the Hub has brought together industry bodies (Kimberley Pilbara Cattlemen's Association, Northern Territory Cattlemen's Association, Northern Territory Farmers Association) as well as NRM organisations (Territory NRM, Rangelands NRM), Regional Development Australia and government agencies (WA Department of Primary Industries and Regional Development and the NT Department of Industry Tourism and Trade) and Charles Darwin University.

Whilst these organisations have had working relationships previously, this is the first time they have come together to deliver a single purpose. The diversity of skills, knowledge and experience that they bring has created a community of practice that is unparalleled for the Northern WA and NT region.

Whilst each partner has slightly different missions and objectives, they are all committed to empowering regional communities and land and sea managers across Northern Western Australia and Northern Territory to prosper in a changing and challenging natural environment.

The trust built by the Hub partnership is leading to improved collaboration between industries, jurisdictions, and between Governments and we are gaining a better understanding of each other's strengths and capabilities which is leading to new and exciting opportunities. For example:

- Farm Business Resilience Training: NTDITT, DPIRD and the Hub have created a collaboration to utilise the training course developed by DPIRD in WA and deliver the course in the NT. This has leveraged FDF funds, enabled producers to cross borders to attend training and saved funds which ensures the delivery of more programs.
- NTFarmers working with WA Producers: following a codesign workshop held in Darwin with Hub partners, NTFarmers made connections with grower groups in Northern WA and were able to facilitate sending their horticultural expert to Carnarvon and surrounding regions to discuss development opportunities.
- NTDITT and NTFarmers: Both were working on water efficiency projects which were very similar. By working with the Hub via our co-design process we were able to combine these projects and further leverage the Hub investment. The combination of these projects has also led to NTFarmers staff and NTDITT staff coming together for the first time to work together creating strong networks and collaboration across multiple non-hub related activities.
- NT Farmers and WA Government: was recently looking for a contact in the WA
 Government regarding workplace relations. Through the trust and relationships
 developed within the Hub NTFarmers was able to call the Hub's WA DPIRD
 representative who identified the appropriate representative and connected them.
 What was once a very difficult and timely process was completed with minimal effort
 and time.

Are there any other changes needed to improve the effectiveness of Part 3 of the Act? Who needs to do what to make those changes happen?

The timing of grant calls, project commencement and contracting could be improved and should take into consideration on-ground reality e.g. holidays, the timing of crop planting schedules, wet seasons etc.

Building resilience takes long time frames - projects should be funded for at least 5 years; shorter-term projects should add value to existing programs. It is hard to attract key people to the region on short-term contracts. By providing longer-term investments in the Hubs, we can invest properly in attracting and retaining a core capacity of key skills from which other programs will benefit.

To date, Government funding for the establishment and initial delivery of the eight (8) Hubs has been allocated on an equal basis across each of the regions. This approach does not account for the unique and pronounced drought challenges experienced across the Hub region due to market failure and climate challenges. As a result, the short-term Government funding commitment to date does not adequately account for the foundational establishment of the Hub and the need for post 2024 funding commitment. A review of the required funding to enable the Hub to operationalise and deliver meaningful outcomes and establish the entity in such a way that will deliver tangible outcome with respect to drought resilience and preparedness and innovation across the region is required.